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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/551,069

09/27/2005

Peter David Ransome

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Vierra Magen Marcus & DeNiro LLP
575 Market Street, Suite 2500
San Francisco, CA 94105

EXAMINER

BALAOING, ARIEL A

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

05/21/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Supplement
Notice of Allowability**

Application No.

10/551,069

Applicant(s)

RANSOME ET AL.

Examiner

ARIEL BALAOING

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendments filed 01/06/2010.
2. ☒ The allowed claim(s) is/are 1,2,4,5,13-16 and 22-29.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. 7. <input type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
|--|--|

/VINCENT P. HARPER/
Supervisory Patent Examiner, Art Unit 2617

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/06/2010 has been entered.

Allowable Subject Matter

2. Claims 1, 2, 4, 5, 13-16, 22-29 are allowed.

3. The following is an examiner's statement of reasons for allowance:

The claims are allowed in view of applicant's submissions, remarks, and amendments filed 01/06/2010. Specifically, the prior art of record does not expressly disclose:

A communications network comprising:

two or more points of presence for communication with wireless terminals, each point of presence represents a cell site, each point of presence having multiple receive antennas which provide diversity reception of wireless signals at the point of presence;

a central site having one or more controllers, the one or more controllers comprise a selection system, **the selection system carries out macro-diversity**

Art Unit: 2617

selection using a cell selector and micro-diversity selection using an antenna selector; and

a switch system through which receive signals from each of the multiple receive antennas of each point of presence are connected to the selection system, wherein based on analysis, at the selection system at the central site, of the receive signals from each of the multiple receive antennas of each point of presence: (a) the cell selector performs the macro-diversity selection to counter macro spatial effects in the communications network, and **selects one of the points of presence from the two or more cell sites points of presence for reception from a particular wireless terminal,** and (b) the antenna selector performs the micro-diversity selection to counter micro spatial effects in the communications network, and selects one of the receive antennas of the multiple receive antennas of the selected point of presence, such that **the antenna selector selects a micro-diversity channel from each point of presence from among at least two micro-diversity channels from each point of presence, and the cell selector selects a macro-diversity channel from among the selected micro-diversity channels.**

Although ISHIKAWA discloses macro and micro base stations and selection of both a macrocell and microcell, the macrocell differs from the point of presence claimed by the applicant. As disclosed a point of presence provide diversity reception at the point of presence which differs from the cell zoning and selection disclosed by ISHIKAWA. Furthermore, REED discloses the use of macro diversity and micro diversity reception (col. 1, line 20-28), however fails to disclose selecting a micro-

Art Unit: 2617

diversity channel from each point of presence from among at least two micro-diversity channels from each point of presence, and the cell selector selects a macro-diversity channel from among the selected micro-diversity channels.

Furthermore, SHPAK (US 2004/0162037) discloses access points **22** including multiple antennas **20, 32** and PALLONEN (US 6,408,169 B1) discloses determination of antenna diversity at a base station, however neither teaches selecting a micro-diversity channel from each point of presence from among at least two micro-diversity channels from each point of presence, and the cell selector selects a macro-diversity channel from among the selected micro-diversity channels

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

SHPAK (US 2004/0162037 A1) – Multi-Channel WLAN transceiver with antenna diversity

PALLONEN (US 6,408,169 B1) – Selecting an antenna beam of a base station

SAKAMOTO et al (US 2004/0258023 A1) – Switch and diversity hand-over processing

Art Unit: 2617

WALTERS et al (US 6,112,058) – Confidence metric processing for bandwidth reduction

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARIEL BALAOING whose telephone number is (571)272-7317. The examiner can normally be reached on Monday-Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, V. Paul Harper can be reached on (571) 272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VINCENT P. HARPER/
Supervisory Patent Examiner, Art Unit 2617

/Ariel Balaoing/
Examiner, Art Unit 2617

/A. B./
Examiner, Art Unit 2617